United States of America

Department of Transportation—federal Aviation Administration

Supplemental Type Certificate

Number SA2075WE

Madras Air Service This certificate, issued to

certifies that the change in the type design for the following product with the limitations and conditions

therefor as specified hereon meets the airworthiness requirements of Part 3

Regulations (See Type Certificate Data Sheets 3A12 and 3A17 for Certification Basis)

Original Product - Type Certificate Number: 3A12

3A17

Make: Cessna

Cessna

Model: 172, 172A, 172B, 172C, 172D, 172E, 172F, 172G, 172H, 172I,

172RG

Description of Type Design Change:

172K, 172L, 172M, 172N, 172P

Installation of Madras Air Service "Super Tips" in accordance with Drawing No. 102, Sheet 1, dated July 13, 1972, and Sheet 2, Revisions B, dated July 11, 1972.

Limitations and Conditions: Approval of this change in type design applies to the above model aircraft only. This approval should not be extended to other aircraft of this model on whych other previously approved modifications are incorporated unless it is determined that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate and Addendum No. SA2075WE shall be maintained as part of the permanent records for the modified aircraft.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the

Federal Aviation Administration.

VINISTRA

Date of application: May 13, 1969

Date reissued :

Date of issuance:

December 3, 1969

Date amended: August 16, 1972; September 27, 1977 Sept. 2, 1980; Apr. 14, 1981; Feb. 4, 1982

By direction of the Administrator

(Signature)

Chief, Seattle Area Aircraft

Certification Office

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SA2075WE Amended February 4, 1982

SUPPLEMENTAL TYPE CERTIFICATE ADDENDUM NO. SA2075WE

The conditions and limitations of Type Certificate Data Sheet No. 3A12 and 3A17 apply except as follows:

This STC Addendum, which is part of Supplemental Type Certificate No. SA2975WE, prescribes the conditions and limitations under which the product for which the STC was issued meets the airworthiness requirements of the Civil Air Regulations. A copy of this STC Addendum is required to be maintained as part of the modified aircraft permanent records.

SUPPLEMENTAL TYPE CERTIFICATE HOLDER: Madras Air Service

1, 11, & 111: CESSNA MODELS 172, 172A, 172B, 172C, (NORMAL CATEGORY) AS MODIFIED

BY STC SA2075WE

Airspeed Limits*

Maneuvering 109 mph (95 knots) 133 mph (116 knots) Maximum Structural Cruising Never Exceed 152 mph (132 knots)

IV, V, VI:

CESSNA MODELS 172D, 172E, 172F, 172G, 172H, 172I, 172K, 172L

NORMAL CATEGORY, AS MODIFIED BY STC SA2075WE

Airspeed Limits*

Maneuvering 116 mph (101 knots) Maximum Structural Cruising 133 mph (116 knots) Never Exceed 165 mph (143 knots)

VII:

CESSNA MODEL 172M (NORMAL CATEGORY) AS MODIFIED BY STC SA2075WE

<u>Airspeed Limits* (Serial Number 17256493, 17260759 through 17265684)</u>

Maneuvering 106 mph Maximum Structural 137 mph Never Exceed 172 mph

(Serial Number 17265685 through 17267584)

Maneuvering 92 knots Maximum Structural Cruising 121 knots Never Exceed 152 knots

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

VIII:

CESSNA MODEL 172N (NORMAL CATEGORY) AS MODIFIED BY STC SA2075WE

Airspeed Limits* 1977 Model through 1979 Model

Maneuvering 92 knots

Maximum Structural Cruising 121 knots

Never Exceed 152 knots

1980 Model and up

Maneuvering 92 knots

Maximum Structural Cruising 121 knots

Maximum Structural Cruising 121 knots Never Exceed 150 knots

IX: CESSNA MODEL 172P, 4 PCL-SM (NORMAL CATEGORY) AS MODIFIED BY STC2075WE

Airspeed Limits* (SERIAL NUMBER 17274010 and on (1981))

Maneuvering 94 knots
Maximum Structural Cruising 121 knots
Never Exceed 150 knots

X: CESSNA MODEL 172RG (SKYHAWK RG) (NORMAL CATEGORY) AS MODIFIED BY STC SA2075WE

Airspeed Limits* 1980, 1981 Model and up

Maneuvering 101 knots

Maximum Structural Cruising 137 knots

Never Exceed 156 knots

- * THESE AIRSPEED LIMITS MAY BE USED IN LIEU OF GROSS WEIGHT REDUCTIONS IMPOSED BY THE ORIGINAL STC AND ADDENDUM DATED DECEMBER 3, 1969.
- NOTE 1: Conformity to Madras Air Service Drawing No. 102, Sheet 1, dated July 13, 1972, and Sheet 2, Revision B, dated July 11, 1972, must be established prior to release of the modified aricraft to Normal Category operations.
- NOTE 2: In addition to the changes required abyve, the aircraft Weight and Balance Report must be revised as follows at the time of the modification.

 Weight of "Super Tips," 9.5 lbs. total: Deduct weight of the tips being removed from the weight of the "Super Tips" and add the difference to the aircraft empty weight. The moment change is negligible.
- NOTE The Utility Category placards will be deleted when "Super Tips" are installed. In addition, the placards required by Type Certificate Data Sheet 3A12, Note 2, must be revised as follows:

NOTE 2.A(4) and 2.A(5) Model 172L MANEUVERING SPEED (CAS) 116 MPH (101 KNOTS)